



briefing notes - road safety issues

West Waikato

Land Transport New Zealand has prepared this road safety issues report. It is based on reported crash data and trends for the 2003–2007 period.

The intent of the report is to highlight the key road safety issues and be a resource to identify possible ways to reduce the number of road deaths and injuries in the West Waikato area. In this report the West Waikato area includes Waipa, Otorohanga and Waitomo district councils.

This report is the ninth road safety report for the West Waikato area. All material unless otherwise stated in this report applies to both local roads and Transit New Zealand (Transit NZ) roads in the West Waikato area.

In each new report one year's data is added to a five year block and the oldest dropped, so it is unlikely that the core issues for any local body would change radically from report to report.

The issues chosen for this report are drawn from either the most common crash types, those that appear over-represented when the West Waikato area is compared to similar local bodies or those with high social cost (high numbers of fatal and serious crashes mainly).

We encourage local authorities to use the Ministry of Transport's Crash Analysis System (CAS) to further investigate the highlighted issues.

Major Road Safety Issues

West Waikato

Intersections

Alcohol

Speed

Bends – Loss of Control

Nationally

Speed

Alcohol

Failure to give way

Restraints

2007 road trauma

Casualties

Deaths	8
Serious casualties	57
Minor casualties	251

Crashes

Fatal crashes	8
Serious injury crashes	38
Minor injury crashes	177
Non-injury crashes	414

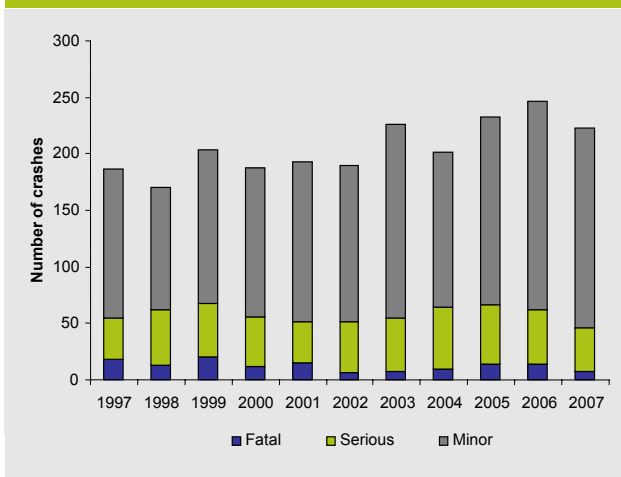
Overview of 2007

In 2007 on local roads in West Waikato there were 101 injury crashes and 206 non-injury crashes, in addition there were 122 injury crashes and 208 non-injury crashes on Transit NZ roads, as reported by the New Zealand Police.

The table below shows the number of injuries resulting from 2007 crashes by rural or urban areas for both local and Transit NZ roads (rural is defined as an area with a speed limit of 80km/h or more).

	Fatalities	Serious injuries	Minor injuries	Total
Rural	7	42	188	237
Urban	1	15	63	79
Total	8	57	251	316

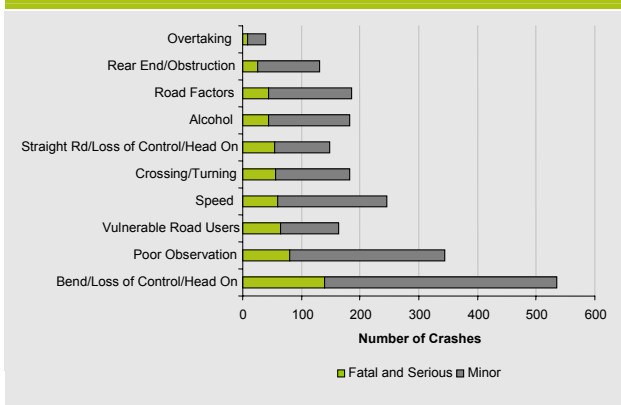
West Waikato injury crashes 1997 - 2007



Fatal crashes in the district rose between the years 2002 and 2006 and declined in 2007.

Serious injury crashes also rose between 2001 and 2004 but have declined over the last 3 years.

Main crash characteristics 2003 - 2007



Local road fatal and serious crashes		
Crash type or contributory cause 2003-2007	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause
Alcohol	19	13
Too fast	20	22
At bends	48	47
At intersections	19	23
Vulnerable road users		
1. Pedestrians	5	4
2. Cyclists	3	3
3. Motorcyclists	15	7
Roadside hazard struck	50	58
Road factors	15	16
Night time	31	32
Loss of control	67	64

Further information about 2007 injury and non-injury crashes on local roads in West Waikato:

- Worst month September, best December
- Worst day Friday, best day Monday
- 33 percent wet road
- 31 percent night time
- 33 percent at intersections
- 74 percent of at fault drivers are male (injury crashes)
- Social cost of crashes in 2007 \$30m

Further information about 2007 injury and non injury crashes on Transit NZ roads in West Waikato:

- Worst month March, best February
- Worst day Friday, best Tuesday
- 37 percent wet road
- 36 percent night time
- 29 percent at intersections
- 69 percent of at fault drivers are male (injury crashes)
- Social cost of crashes in 2007 \$52m

Speed

Nationally, speed is one of the major contributing factors to road crashes. For the 12 months to the end of December 2007, excessive speed contributed to around 33 percent of fatal crashes and 18 percent of injury crashes.

During 2007, there were 2103 injury crashes where the driver was travelling too fast for conditions.

Reducing speeds to appropriate levels is an important road safety goal. Excessive speed increases the likelihood of a crash occurring by reducing the time available for drivers to respond to hazardous situations and it also leads to more serious injuries. Research has shown that a one km/h reduction in mean speed can produce up to a three percent reduction in injury crashes.

In the West Waikato, excessive speed was a factor in 22 percent of injury crashes in 2007.

There were 245 speed related injury crashes reported in the last five years

Speed related injury crashes	2003	2004	2005	2006	2007
Urban	8	7	6	9	8
Rural	33	30	47	49	47
Total	41	37	53	59	55

Males represented 71 percent of at fault drivers in speed related injury crashes.

Drivers at fault or part fault in speed related injury crashes (2003-2007) *	Male	Female	Total
15- 19 years	44	18	62
20 - 24	33	14	47
25 - 29	15	7	22
30 - 39	37	10	47
40 - 49	17	12	29
50 - 59	18	4	22
60 - 69	4	4	8
70+	2	0	2
Total	170	69	239

* (note ranges are not equal)

Further information about speed related injury crashes (2003 to 2007) on local roads in West Waikato:

- 5 deaths, 40 serious injuries, 140 minor injuries
- 72 percent of at fault drivers were male
- Most common crash type, Bend – loss of control/head on
- 83 percent midblock
- 32 percent wet road
- 41 percent night time
- Worst month February, best June
- Worst day of week Sunday, best Tuesday

Further information about speed related injury crashes (2003 to 2007) on Transit NZ roads in West Waikato:

- 13 deaths, 34 serious injuries, 153 minor injuries
- 70 percent of at fault drivers were male
- Most common crash type, Bend – loss of control/head on
- 87 percent midblock
- 50 percent wet road
- 39 percent night time
- Worst month December, best November
- Worst day of week Friday, best Monday

Intersections

Crashes at intersections are the most common crash type in urban areas of the West Waikato.

During the five year period 2003 to 2007 there were 258 injury crashes at intersections and 668 non-injury crashes. In these 5 people died, 65 received serious injuries and 321 received minor injuries.

Intersection crashes	2003	2004	2005	2006	2007
Injury crash	45	51	61	56	45
Non-injury crash	104	128	144	140	152
Total	149	179	205	196	197

The table below shows the locations of the five intersections with the highest number of crashes in the West Waikato between 2003 and 2007.

Intersection name	Total crashes 2003 - 2007	Injury crashes 2003 - 2007	Total crashes in 2007
SH1/SH1B	39	5	9
SH1/Duke Street	21	8	1
SH3/Vaile Street	20	2	2
SH 1/Shakespeare Street	19	4	6
SH 3/SH 21	16	7	2

Crashes at Tee junctions in urban areas are the most common type of intersection crash reported, followed by crashes at Tee rural junctions.

Junction type	Rural	Urban
Roundabout	-	56
Tee	242	283
Cross (X)	34	231
Y	19	19
Other (includes driveways)	8	34

The main causes contributing to crashes described in Police reports were:

- Failure to stop and give way
- Not checking properly
- Too fast for conditions

The most common crash is one when a driver fails to give way and crosses the path of a vehicle coming at a right angle to them. The second most common crash is when a driver turns right at an intersection and is hit by a vehicle approaching from the right.

Further information about injury crashes at intersections (2003 to 2007) on local roads in West Waikato:

- 4 deaths, 32 serious injuries, 147 minor injuries
- 63 percent of at fault drivers were male
- 9 percent involved alcohol
- 24 percent wet roads
- 31 percent night time
- Worst month February, best December
- Worst day of week Friday, best Sunday

Further information about injury crashes at intersections (2003 to 2007) on Transit NZ roads in West Waikato:

- 1 death, 33 serious injuries, 174 minor injuries
- 60 percent of at fault drivers were male
- 5 percent involved alcohol
- 28 percent wet roads
- 22 percent night time
- Worst month May, best March
- Worst day of week Friday, best Monday

Drink-driving

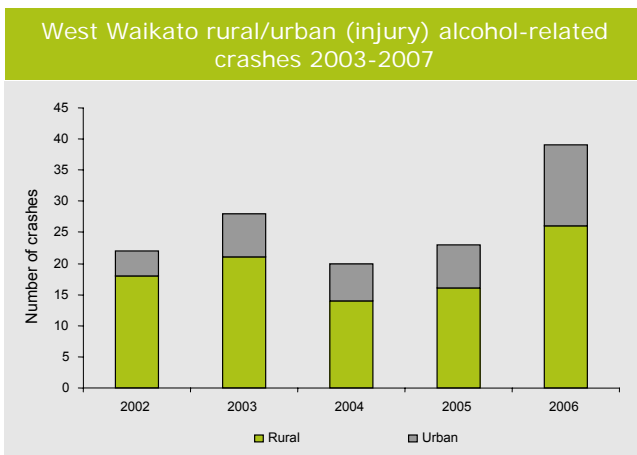
Alcohol affects the way people drive. Studies show that the risk of being involved in a crash increases rapidly as a driver's blood alcohol level rises. A driver over the legal limit (80mg of alcohol per 100ml of blood) is three times more likely to be involved in a crash than a sober driver.

Contrary to popular opinion, people with high blood alcohol levels are more likely to be injured or killed in a crash than sober drivers in the same crash and if injured, they are also more likely to encounter complications in their recovery.

In New Zealand for the 12 months to December 2007, alcohol-affected drivers contributed to 34 percent of all fatal crashes and 15 percent of all injury crashes.

In West Waikato, alcohol was a factor in 17 percent of injury crashes in 2007, a small increase from 2006.

There were 147 alcohol-related injury crashes reported in the last five years.



Key locations

The following provides a breakdown of the key locations in West Waikato at which drink-driving crashes occurred during the 2003 to 2007 period.

West Waikato
SH 3, 30m south of Blackett Road
SH 3, 100m south of Ye Old Mill Road
SH 1, 600m east of Peake Road
Otewa Road, 250m west of Mangawhero Road

Further information about alcohol related injury crashes (2003 to 2007) on local roads in West Waikato:

- 6 deaths, 23 serious injuries, 84 minor injuries
- 78 percent of at fault drivers were male
- 86 percent midblock
- 39 percent urban
- 27 percent wet road
- 67 percent night time
- Worst month April, best May
- Worst day of week Saturday, best Monday

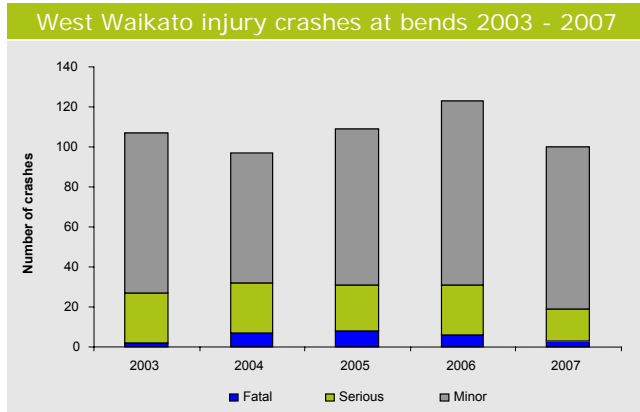
Further information about alcohol related injury crashes (2003 to 2007) on Transit NZ roads in West Waikato:

- 7 deaths, 39 serious injuries, 75 minor injuries
- 75 percent of at fault drivers were male
- 90 percent midblock
- 19 percent urban
- 31 percent wet road
- 68 percent night time
- Worst month January, best December
- Worst day of week Sunday, best Wednesday

Crashes at bends

Between 2003 and 2007 47 percent of all injury crashes in the West Waikato area occurred at bends. These crashes resulted in 34 fatalities, 160 serious injuries and 605 minor injuries.

Crash numbers rose between 2004 and 2006 but declined in 2007.



Most crashes at bends involved a driver losing control of their vehicle and either running off the road or colliding with another vehicle.

After drivers lose control their vehicles they often crash into roadside hazards such as ditches, banks, poles and trees. Hitting these objects can result in a relatively minor off-road event turning into something far more serious.

The three most common roadside hazards struck in injury crashes in West Waikato were fences (164), banks (129) and ditches (69) from a total of 707 objects struck.

The following table lists the main characteristics of these crashes.

Crash characteristic	Crashes
Single vehicle	78 percent
Alcohol	16 percent
Excessive speed for the conditions	39 percent
Road factors	24 percent
Poor handling	32 percent
Rural road	89 percent
Wet road	39 percent
Night time	36 percent

Further information about injury crashes on bends (2003 to 2007) on local roads in West Waikato:

- 11 deaths, 62 serious injuries, 249 minor injuries
- 64 percent of at fault drivers were male
- Most common crash type, Too fast for conditions causing loss of control
- Most common age group 15-19 years
- 21 percent of crashes involved alcohol
- Worst month February, best June
- Worst day of week Sunday, best Tuesday
- Worst time period, 3 – 6pm

Further information about injury crashes on bends (2003 to 2007) on Transit NZ roads in West Waikato:

- 23 deaths, 98 serious injuries, 356 minor injuries
- 71 of at fault drivers were male
- Most common crash type, Too fast for conditions causing loss of control
- Most common age group 30-39 years
- 12 percent of crashes involved alcohol
- Worst month December, best November
- Worst day of week Friday, best Wednesday
- Worst time period, 12 - 3pm

Loss of Control

Between 2003 and 2007 64 percent of all injury crashes in the West Waikato area involved loss of control. These crashes resulted in 44 fatalities, 227 serious injuries and 806 minor injuries.

Crash numbers rose between 2004 and 2006 and declined in 2007.

Loss of Control Crashes				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2003	4	34	107	145
2004	7	35	80	122
2005	10	29	103	142
2006	9	35	122	166
2007	6	27	112	144
Total	36	160	524	719

Most loss of control crashes involved a driver losing control of their vehicle and either running off the road or colliding with another vehicle.

After drivers lose control their vehicles often crash into roadside hazards such as ditches, banks, poles and trees. Hitting these objects can result in a relatively minor off-road event turning into something far more serious.

The three most common roadside hazards struck in injury crashes in West Waikato were fences (209), cliffs or banks (160) ditches (110) and from a total of 954 objects struck.

Main characteristics of loss of control injury crashes	
Crash characteristic	Percentage of crashes
Bend	75
Straight road	25
Single vehicle	79
Alcohol	17
Excessive speed for the conditions	31
Road factors	21
Poor handling	29
Rural road	88
Wet road	35
Night time	36

Further information about loss of control injury crashes (2003 to 2007) on local roads in West Waikato:

- 12 deaths, 83 serious injuries, 312 minor injuries
- 65 percent of at fault drivers were male
- Most common crash type, Bend – loss of control/head on
- Most common age group 15-19 years
- 16 percent involved alcohol
- Worst month February, best December
- Worst day of week Friday, best Monday

Further information about loss of control injury crashes (2003 to 2007) on Transit NZ roads in West Waikato:

- 32 deaths, 144 serious injuries, 494 minor injuries
- 70 percent of at fault drivers were male
- Most common crash type, Bend – loss of control/head on
- Most common age group 20-24 years
- 12 percent involved alcohol
- Worst month December, best November
- Worst day of week Sunday, best Wednesday

Partnerships

Land Transport NZ works closely with many road safety partners at national, regional and local levels. These include government departments, enforcement agencies, territorial local authorities, health authorities and local service providers.

Some of the key road safety partners in the West Waikato area include:

New Zealand Police

Waikato District Road Policing Manager
Inspector Leo Tooman
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Phone 07 850 7063

Road Safety Co-ordinator

Waipa District
Megan Jolly
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Otorohanga and Waitomo Districts
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Local Authority Engineers

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Accident Compensation Corporation

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